

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

EFW  
AF

Patent Application No. 09/851,882

Applicants: Ghosh et al.

Filed: May 9, 2001

For: COSMETIC COMPOSITION WITH  
IMPROVED SKIN MOISTURIZING  
PROPERTIES

TC/AU: 1617

Examiner: G. Yu

Docket No.: 210556

Customer No.: 23460

**TRANSMITTAL OF  
APPELLANTS' APPEAL BRIEF**

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 41.37, appellants hereby submit Appellants' Brief on Appeal.

The items checked below are appropriate:

**1. Status of Appellants**

This application is on behalf of  other than a small entity or  a small entity.

**2. Fee for Filing Brief on Appeal**

Pursuant to 37 CFR 41.20(2), the fee for filing the Brief on Appeal is for:  other than a small entity or  a small entity.

**Brief Fee Due** \$500.00

**3. Oral Hearing**

Appellants request an oral hearing in accordance with 37 CFR 41.47.

A separate paper requesting oral hearing is attached.

**4. Extension of Time**

- Appellants petition for a one-month extension of time under 37 CFR 1.136, the fee for which is \$120.00.
- Appellants believe that no extension of time is required. However, this conditional petition is being made to provide for the possibility that appellants have inadvertently overlooked the need for a petition and fee for extension of time.

**Extension fee due with this request: \$120.00**

**5. Total Fee Due**

The total fee due is:

Brief on Appeal Fee	\$500.00
Request for Oral Hearing	\$ 0.00
Extension Fee (if any)	\$120.00

**Total Fee Due: \$620.00**

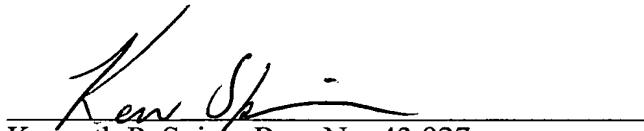
**6. Fee Payment**

- 
- Attached is a check in the sum of \$  
Charge Account No. 12-1216 the sum of \$620.00. A duplicate of this transmittal is attached.

**7. Fee Deficiency.**

- If any additional fee is required in connection with this communication, charge Account No. 12-1216. A duplicate copy of this transmittal is attached.

Respectfully submitted,

  
Kenneth P. Spina, Reg. No. 43,927  
LEYDIG, VOIT & MAYER, LTD.  
Two Prudential Plaza  
180 North Stetson Ave., Suite 4900  
Chicago, Illinois 60601-6780  
(312) 616-5600 (telephone)  
(312) 616-5700 (facsimile)

Date: July 29, 2005

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U.S. PATENT & TRADEMARK OFFICE  
In re Appln. of Ghosh et al.  
Application No. 09/851,882

CERTIFICATE OF MAILING

I hereby certify that this APPEAL BRIEF TRANSMITTAL AND APPEAL BRIEF (along with any documents referred to as attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date: July 29, 2005

Ken Shi

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Patent Application No. 09/851,882

Applicants: Ghosh et al.

Filed: May 9, 2001

For: COSMETIC COMPOSITION WITH  
IMPROVED SKIN MOISTURIZING  
PROPERTIES

TC/AU: 1617

Examiner: G. Yu

Docket No.: 210556

Customer No.: 23460

**APPELLANTS' APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In support of the appeal from the final rejection dated February 9, 2005 ("Final Rejection"), Appellants now submit their brief.

*Real Party In Interest*

The real party in interest is Alberto Culver Company.

*Related Appeals and Interferences*

Appellant is not aware of any appeals or interferences that will directly affect, be affected by, or have a bearing on the Board's decision in this appeal.

*Status of Claims*

Claims 1-68 are currently pending, stand rejected as allegedly obvious under 35 U.S.C. § 103(a), and are the subject of this appeal.

*Status of Amendments*

No amendment was filed subsequent to the Final Rejection.

*Summary of Claimed Subject Matter*

The following is a concise summary of the subject matter defined in each of the independent claims, and dependent claims argued separately.

**A. Claims 1, 39 and 41 (Compositions)**

Claim 1 is independent and recites a composition comprising a skin moisturizing effective amount of a combination of urea and coenzyme Q10, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.). Compositions containing skin moisturizing effective amounts of urea and coenzyme Q10 are disclosed in the specification at, for example, pp. 4-5 (para. [0018]), pp. 13-15 (para. [0042]-[0052] (10:1 ratio)), pp. 16-17 (para. [0053]-[0056] (9:1 ratio), pp. 17-19 (para. [0057]-[0062] (10:1 ratio)), pp. 19-21 (para. [0063]-[0064] (6:1 ratio)), and pp. 21-22 (para. [0065] (10:1 ratio)).

Claim 39 is independent and recites a composition comprising: (a) from about 0.1% to about 10% of urea by weight of the composition, and (b) from about 0.001% to about 5% coenzyme Q10 by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.). The composition of claim 39 optionally can include one or more of the following: (i) emulsifiers, (ii) thickeners, (iii) preservatives, (iv) sunscreens, (v) chemical neutralizers, (vi) odor-masking agents, (vii) solid emollients, (viii) soothing additives, (ix) moisturizing additives, and (x) antioxidants. Compositions containing the recited amounts and ratios of urea and coenzyme Q10 are disclosed in the specification at, for example, pp. 4-5 (para. [0018]), pp. 13-15 (para. [0042]-[0052] (0.5 wt% urea and 0.05 wt% coenzyme Q10, 10:1 ratio)), pp. 17-19 (para. [0057]-[0062] (0.5 wt% urea and 0.05 wt% coenzyme Q10, 10:1 ratio)), pp. 19-21 (para. [0063]-[0064] (0.3 wt% urea and 0.05 wt% coenzyme Q10, 6:1 ratio)), and pp. 21-22 [para. [0065] (0.5 wt% urea and 0.05 wt% coenzyme Q10, 10:1 ratio)). The optional ingredients are disclosed in the specification at, for example, pp. 7-11 (para. [0026]-[0035]), and pp. 17-25 (para. [0057]-[0067]).

Claim 41 is independent and recites a composition comprising an emulsion of: (a) an aqueous phase, (b) an oil phase, (c) from about 0.1% to about 10% urea by weight of the composition, and (d) from about 0.001% to about 5% coenzyme Q10 by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1

to about 10:1 (wt./wt.). The composition of claim 41 optionally can include one or more of the following: (i) emulsifiers, (ii) thickeners, (iii) preservatives, (iv) sunscreens, (v) chemical neutralizers, (vi) odor-masking agents, (vii) solid emollients, (viii) soothing additives, (ix) moisturizing additives, and (x) antioxidants. Emulsions containing an aqueous phase and an oil phase are disclosed in the specification at, for example, pp. 6-7 (para. [0023]-[0026]), and such emulsions containing the recited amounts and ratios of urea and coenzyme Q10 are disclosed in the specification at, for example, pp. 17-19 (para. [0057]-[0062] (0.5 wt% urea and 0.05 wt% coenzyme Q10, 10:1 ratio)), pp. 19-21 (para. [0063]-[0064] (0.3 wt% urea and 0.05 wt% coenzyme Q10, 6:1 ratio)), and pp. 21-22 [para. [0065] (0.5 wt% urea and 0.05 wt% coenzyme Q10, 10:1 ratio)). The optional ingredients are disclosed in the specification at, for example, pp. 7-11 (para. [0026]-[0035]), and pp. 17-25 (para. [0057]-[0067]).

B. *Claims 43, 44, 46 and 54 (Moisturization Methods)*

Claim 43 is dependent and recites a method of enhancing moisture retention in the skin by topically applying to the skin a moisture-retaining effective amount of the composition of claim 1. Support for the composition element can be found in the specification, e.g., as discussed above in Part A (Compositions). Support for a method of enhancing moisture retention in the skin by topically applying the composition can be found in the specification at, for example, p. 3 (para. [0008] and [0010]), pp. 13-17 (para. [0042]-[0056]) and Fig. 3.

Claim 44 is dependent and recites a method of reducing the rate of escape of water from the epidermis by topically applying to the skin a moisture-loss inhibiting effective amount of the composition of claim 1. Support for the composition element can be found in the specification, e.g., as discussed above in Part A (Compositions). Support for a method of reducing the rate of escape of water from the epidermis by topically applying the composition to the skin can be found in the specification at, for example, p. 3 (para. [0008] and [0010]), pp. 13-17 (para. [0042]-[0056]) and Fig. 3.

Claim 46 is independent and recites a method of moisturizing the skin by applying to the skin a composition comprising a skin moisturizing effective amount of a combination of urea and coenzyme Q10, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.). Support for the amounts and ratios of urea and coenzyme Q10 can be found in the specification, e.g., as discussed above in part A (Compositions). Support for a method of moisturizing the skin by topically applying the

composition to the skin can be found in the specification at, for example, p. 3 (para. [0008]), p. 4 (para. [0017]), pp. 13-17 (para. [0042]-[0056]) and Fig. 3.

Claim 54 is independent and recites a method of increasing the cumulative skin moisturization of a cosmetic composition by adding a skin moisturizing enhancing effective amount of a combination of coenzyme Q10 and urea, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.). Support for the amounts and ratios of urea and coenzyme Q10 can be found in the specification, e.g., as discussed above in part A (Compositions). Support for a method of using the combination of urea and coenzyme Q10 to increase cumulative skin moisturization can be found in the specification at, for example, pp. 15-17 (para. [0049]-[0056]), and Figs. 1-3.

C. *Claim 45 (Method of Improving After-Feel)*

Claim 45 is independent and recites a method of improving the after-feel of a cosmetic composition when applied to the skin by including an after-feel enhancing-effective amount of a combination of coenzyme Q10 and urea, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.). Support for the amounts and ratios of urea and coenzyme Q10 can be found in the specification, e.g., as discussed above in part A (Compositions). Support for a method of using the recited urea/coenzyme Q10 combination to improve after-feel can be found in the specification at, for example, p. 3 (para. [0008], [0009], [0011] and [0012]), p. 4, para. [0017], and pp. 27-28 (para. [0069]).

*Grounds of Rejection to be Reviewed on Appeal*

The grounds of rejections to be reviewed on appeal are as follows:

(1) rejection of claims 1-13, 17-29, and 32-68 as allegedly obvious under 35 U.S.C. § 103(a) over U.S. Patent No. 5,889,062 (“Hoppe”) in view of Raab, *Uses of Urea in Cosmetology*, 1990 (“Raab”);

(2) rejection of claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35, 38-41 and 43-46 as allegedly obvious under 35 U.S.C. § 103(a) over the Eucerin® Q10 Anti-Wrinkle product package (“Eucerin® Product Package”), in view of the English translation of “Eucerin® Q10 Active Nacht, Eucerin: Pressmitteilungen, October 2000” (“Eucerin® Press Release”), Business Wire (February 1, 1999, p. 1) (“Business Wire”), U.S. Patent No. 4,654,373 (“Bertelli”), and FDC Reports (October 26, 1992) (“FDC Reports”);

(3) rejection of claims 13, 16, 18, 22, 28, 31-33, 36, 42, 47-53 and 55-68 as allegedly obvious under 35 U.S.C. § 103(a) over Eucerin® Product Package in view of Eucerin Press Release, Business Wire, Bertelli, FDC Reports and Hoppe; and

(4) rejection of claims 23-25 and 37 as allegedly obvious under 35 U.S.C. § 103(a) over Eucerin® Product Package in view of Eucerin® Press Release, Business Wire, Bertelli, FDC Reports, Hoppe, and Raab.

*Argument*

Three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. MPEP § 2143. “Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant’s disclosure.” *Velander v. Garner*, 348 F.3d 1359, 68 USPQ2d 1769 (Fed. Cir. 2003). See also *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). For the reasons that follow, the cited art fails to meet these criteria and does not render obvious the claimed invention.

1. Rejection of Claims 1-13, 17-29 and 32-68 over Hoppe in view of Raab

A. *Claims 1-13, 17-29, 32-42 and 62-68*

Hoppe teaches a method of treating senile xerosis and chronological aging of the skin by applying one or more ubiquinones, plastoquinones, and derivatives thereof (which are “active compounds” according to Hoppe, e.g., at col. 3, lines 31-39). Coenzyme Q10 is one of several possible ubiquinones. Hoppe teaches combining the active compounds with known carrier ingredients to produce topical compositions (col. 4, lines 1-15).

According to Hoppe (col. 2, lines 24-31), the ubiquinones, plastoquinones, and derivatives thereof repair damage associated with aging of the skin and are said to affect structural changes of aged skin. Hoppe (col. 3, lines 16-21) teaches that ubiquinones play a role in cellular energy metabolism and function as antioxidants. Hoppe teaches combining the ubiquinones and plastoquinones with other compounds that affect cellular energy metabolism (col. 4, lines 25-35) and other antioxidants (col. 4, lines 16-24). Hoppe also teaches adding sunscreens (col. 4, lines 36-67). See also col. 5, lines 1-6, of Hoppe, which

teaches combining the active compounds “with anti-oxidants, substances of aerobic cell energy metabolism and/or UV absorbers.”

However, Hoppe does not teach or suggest combining urea with any of the active compounds described therein, and much less combining urea with coenzyme Q10 specifically in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 1-13, 17-29, 32-42 and 62-68 of the present application. In fact, Hoppe fails to so much as even mention urea. Moreover, nothing in Hoppe would have suggested the desirability of using coenzyme Q10, specifically, in combination with urea to improve moisturizing properties, as Applicants have discovered. Indeed, the Final Rejection (p. 3, first full para.) positively admitted: “Hoppe et al. fails to teach adding urea.” As such, there is no teaching, suggestion or motivation in Hoppe to modify the subject matter disclosed therein to formulate a combination of urea and coenzyme Q10 as recited in any of claims 1-13, 17-29, 32-42 and 62-68 of the present application.

Raab describes the topical efficacy of urea, and generally describes (p. 102, second col.) lotions and creams that contain urea formulated in a water-in-oil and oil-in-water emulsions. Raab teaches (p. 98, first and second col.) using urea cosmetically for its moisturizing action, desquamating action, antimicrobial action, and buffering action. Raab further teaches (p. 98, second col.) using urea therapeutically for its keratolytic action, ability to enhance the penetration and/or activity of specific drugs, and anti-inflammatory action. The drugs reportedly used in combination with urea are listed in Table III of Raab (p. 101, first col.) and consist of glucocorticoids (hydrocortisone), anthralin, tretinoin and salicylic acid. According to Raab (p. 102, first col.), the specific urea/drug combinations in Table III were based on a “survey of the dermatological indications for urea-containing topicals.”

However, Raab fails to teach or suggest adding coenzyme Q10, and much less combining urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 1-13, 17-29, 32-42 and 62-68 of the present application. In fact, Raab fails to even mention coenzyme Q10 (or any other ubiquinones). Moreover, there is nothing in Raab that would have suggested the desirability of formulating a combination of urea and coenzyme Q10 as recited in the claims. Raab simply provides no teaching, suggestion or motivation to modify the subject matter disclosed therein to formulate urea and coenzyme Q10 as recited in any of claims 1-13, 17-29, 32-42 and 62-68 of the present application.

“The mere fact that the prior art could be so modified [to produce the claimed device] would not have made the modification obvious unless the prior art suggested the desirability

of the modification.” *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). “Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.” *Carella v. Starlight Archery*, 804 F. 2d 135, 231 USPQ 644 (Fed. Cir. 1986). “The showing of motivation to combine must be clear and particular, and it must be supported by actual evidence.” *Teleflex, Inc. v. Ficosa North American Corp.*, 299 F.3d 1313, 63 USPQ2d 1374 (Fed. Cir. 2002).

In this case, the Final Rejection has not produced any credible evidence, which clearly and particularly suggests the desirability of combining the teachings of Hoppe and Raab so as to formulate the claimed composition. As there is no teaching, suggestion or incentive in either of Hoppe or Raab that would support combining their teachings in such a way as to arrive at Applicants’ invention, Hoppe and Raab are not properly combinable. For at least the foregoing reasons, Hoppe and Raab do not render obvious claims 1-13, 17-29, 32-42 and 62-68 of the present application.

B. *Claims 43, 44 and 46-61*

The arguments set forth above are hereby incorporated by reference so as to minimize repetition.

For the reasons discussed above, Hoppe does not teach or suggest whatsoever combining urea with coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 43, 44, and 46-61 of the present application. Further, Hoppe does not teach or suggest using the recited combination for enhancing moisture retention in the skin as recited in claim 43, reducing the rate of escape of water from the epidermis as recited in claim 44, moisturizing the skin as recited in claims 46-53, or increasing cumulative skin moisturization as recited in claims 54-61. Moreover, there is nothing in Hoppe that would have suggested the desirability of using the required combination of urea and coenzyme Q10 to affect the results recited in claims 43, 44, and 46-61 of the present application.

Rather, as discussed above, Hoppe is primarily concerned with the treatment of senile xerosis and chronological aging of the skin using one or more ubiquinones, plastoquinones and derivatives thereof, optionally in combination with anti-oxidants, substances of aerobic cell energy metabolism and/or UV absorbers. There is no teaching or suggestion in Hoppe of adding urea, and the Final Rejection (p. 3) even admitted Hoppe fails to teach adding urea. As such, Hoppe does not provide any teaching, suggestion or motivation to modify the

subject matter disclosed therein so as to perform any of the methods recited in claims 43, 44 and 46-61 of the present application.

Likewise, as discussed above, Raab does not teach or suggest adding coenzyme Q10, and much less combining urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.), which is required in claims 43, 44, and 46-61. Further, Raab does not teach or suggest using the specific combination of urea and coenzyme Q10 for enhancing moisture retention in the skin as recited in claim 43, reducing the rate of escape of water from the epidermis as recited in claim 44, moisturizing the skin as recited in claims 46-53, or increasing cumulative skin moisturization as recited in claims 54-61. Moreover, nothing in Raab would have suggested the desirability of using the required combination of urea and coenzyme Q10 to affect the results recited in any of claims 43, 44 and 46-61.

As discussed above, Raab is primarily concerned with the topical uses of urea and discloses specific drug/urea combinations, but fails to teach or suggest combining urea with coenzyme Q10 or any other ubiquinone, despite the fact that a “survey” was conducted to identify drug/urea combinations. As such, Raab does not provide any teaching, suggestion or motivation to modify the subject matter disclosed therein to perform the methods recited in any of claims 43, 44, and 46-61 of the present application.

The Final Rejection has failed to produce any evidence clearly and particularly showing a motivation or incentive that supports combining Hoppe and Raab to perform the methods recited in any of claims 43, 44, and 46-61. As the references themselves do not provide any such motivation or incentive, Hoppe and Raab are not properly combinable. For at least the foregoing reasons, Hoppe and Raab do not render obvious any of claims 43, 44, and 46-61 of the present application.

C. *Claim 45*

The arguments in parts A and B above are hereby incorporated by reference so as to minimize repetition.

For the reasons discussed above, Hoppe does not teach or suggest whatsoever a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.), which is required in claim 45 of the present application. Further, Hoppe does not teach or suggest using the required combination of coenzyme Q10 and urea for improving the after-feel of a cosmetic composition as recited in claim 45. Moreover, there is nothing in Hoppe that would have suggested the desirability of using the recited combination to improve the after-feel of a cosmetic composition according to claim 45.

As discussed above, Hoppe is primarily concerned with the treatment of senile xerosis and chronological aging of the skin using one or more ubiquinones, plastoquinones and derivatives thereof. While Hoppe teaches optionally combining the active compounds, specifically, with anti-oxidants, substances of aerobic cell energy metabolism and/or UV absorbers, Hoppe does not teach or suggest whatsoever adding urea, and the Final Rejection even admitted that Hoppe fails to teach adding urea. As such, Hoppe does not provide any teaching, suggestion or motivation to modify the subject matter disclosed therein to perform the method recited in claim 45 of the present application.

Likewise, Raab does not teach or suggest coenzyme Q10, and much less a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claim 45 of the present application. Further, there is nothing in Raab that would have suggested the desirability of using the recited combination of urea and coenzyme Q10 to improve the after-feel of a cosmetic composition as recited in claim 45. Raab is primarily concerned with the topical efficacy of urea, but fails to teach or suggest combining urea with coenzyme Q10 (or any other ubiquinone) despite the fact that a “survey” was conducted to identify drug/urea combinations. As such, Raab does not provide any teaching, suggestion or motivation to modify the subject matter disclosed therein to perform the method recited in claim 45 of the present application.

The Final Rejection has failed to produce any evidence clearly and particularly showing a motivation or incentive that supports combining Hoppe and Raab in such a way as to arrive at the method recited in claim 45 of the present application. As the references themselves do not provide any such motivation or incentive, Hoppe and Raab are not properly combinable. For at least the foregoing reasons, Hoppe and Raab do not render obvious claim 45 of the present application.

2. Rejection of Claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35, 38-41, 43-46 and 54 over Eucerin® Product Package in view of Eucerin® Press Release, Business Wire, Bertelli and FDC Reports

A. *Claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35 and 38-41*

Eucerin® Product Package lists the ingredients in “Eucerin® Q10 Anti-Wrinkle Sensitive Skin Creme,” which include, *inter alia*, coenzyme Q10, tocopheryl acetate (Vitamin E), titanium dioxide, and a host of other ingredients, many of which are standard in topical formulations (e.g., stearyl alcohol, cetyl alcohol, corn oil, water, sodium hydroxide, etc.). The Final Rejection alleges (p. 4, fourth para.) Eucerin® Press Release teaches that the

product has been marketed by Beiersdorf since October 2000. However, Eucerin® Press Release and Eucerin® Product Package refer to different products.

Eucerin® Press Release describes the “Eucerin® Q10 ACTIVE” product line, particularly “Eucerin® Q10 ACTIVE Night anti-wrinkle care,” which contains Vitamin A (p. 2, middle paragraph). Vitamin A is not a listed ingredient in Eucerin® Product Package (and, conversely, Eucerin® Product Package lists ingredients, such as Vitamin E, which Eucerin® Press Release does not mention). Consequently, the dates reported in the Eucerin® Press Release do not pertain to Eucerin® Product Package, as the Final Rejection asserts.

Eucerin® Product Package and Eucerin® Press Release also do not teach or suggest modifying either product to include urea, and much less combining urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35 and 38-41. Further, the Eucerin® Product Package and Eucerin® Press Release fail to even mention urea. Moreover, there is nothing in Eucerin® Product Package or Eucerin® Press Release that would have suggested the desirability of modifying either product to include the recited combination of urea and coenzyme Q10. Indeed, the Final Rejection itself (p. 4, last para.) positively admitted: “Eucerin product package and press release fail to disclose the amount of coenzyme Q10 nor teach adding urea in the composition.” As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein so as to formulate urea and coenzyme Q10 as recited in any of claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35 and 38-41 of the present application.

The same can be said for Business Wire and Bertelli. Business Wire states that Beiersdorf entered into a licensing agreement with Q-Pharma to use “Q-Pharma’s patented coenzyme Q10 (CoQ10) platform technology in all topical use non-prescription products.” Business Wire also mentions that Q-Pharma is the owner of Bertelli (U.S. Patent No. 4,654,373). However, Business Wire and Bertelli fail to so much as even mention urea. Indeed, the Final Rejection itself (p. 5, third para.) positively admitted: “While the Bertelli reference further suggests adding other topical actives in the composition, … the combined references above fail to teach adding urea in the Eucerin composition.” As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein so as to formulate urea and coenzyme Q10 as recited in any of claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35 and 38-41 of the present application.

FDC Reports describes Beiersdorf's "Eucerin Plus" product, which reportedly contains 5% sodium lactate and 5% urea. FDC Reports states that Eucerin Plus is formulated for "severely dry, scaly skin conditions" (first para.) and that "samples will be distributed to doctors nationwide in 1992" (last para.). However, FDC Reports does not teach or suggest modifying Eucerin Plus, and much less re-formulating the product to include a combination of urea and coenzyme Q10 as recited in claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35 and 38-41. In fact, FDC Reports fails to even mention coenzyme Q10 (or any other ubiquinones). There simply is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus so as to formulate urea and coenzyme Q10 as recited in claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35, 38-41 of the present application.

Nevertheless, the Final Rejection asserts that the combining 5% urea in Beiersdorf's (coenzyme Q10) anti-wrinkle product would have been obvious "as motivated by Bertelli and FDC Reports, because of an expectation of successfully producing an enhanced skin treatment composition which moisturizes and treats damaged and impaired skin" (p. 5, last para.). In arriving at this conclusion, the Final Rejection has failed to apply the proper legal standard for obviousness.

As stated above, "[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." *Carella v. Starlight Archery*, 804 F. 2d 135, 231 USPQ 644 (Fed. Cir. 1986). "The showing of motivation to combine must be clear and particular, and it must be supported by actual evidence." *Teleflex, Inc. v. Ficosa North American Corp.*, 299 F.3d 1313, 63 USPQ2d 1374 (Fed. Cir. 2002). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *Velander v. Garner*, 348 F.3d 1359, 68 USPQ2d 1769 (Fed. Cir. 2003).

In this case, the Final Rejection's basis for combining the teachings of the multitude of cited references is untenable and even self-contradictory. For instance, as noted above, the Final Rejection asserts that adding 5% urea to the Eucerin anti-wrinkle product is "motivated by Bertelli and FDC Reports" (p. 5, last para.). This assertion directly contradicts the prior admission in the Final Rejection that Bertelli fails to teach adding urea in the Eucerin composition (p. 3, third para.). Bertelli cannot be said to motivate what it admittedly fails to teach. Further, there is no evidentiary basis for the alleged "expectation of successfully producing an enhanced skin treatment" as the Final Rejection asserts (p. 5, last para.).

In fact, Business Wire and FDC Reports appear to provide evidence to the contrary. Business Wire states that Beiersdorf's license to use coenzyme Q10 was limited to its "non-prescription products." However, FDC Reports states that Eucerin Plus (Beiersdorf's 5% urea product) will be "distributed to doctors nationwide," suggesting that Eucerin Plus is a prescription product, and not a "non-prescription" product. Business Wire and FDC Reports thus suggest that Eucerin Plus is outside the scope of Beiersdorf's license. As such, it appears that Beiersdorf's license would not have allowed them to use coenzyme Q10 in connection with Eucerin Plus, even though Eucerin Plus was in existence at the time of the license. Perhaps even more telling is the fact that Eucerin® Product Package and Eucerin® Press Release show that, following the license, Beiersdorf launched a number of "combination" products containing coenzyme Q10, yet they chose to combine, e.g., Vitamin E, Vitamin A, and other ingredients from among the multitude of possibilities, but no urea whatsoever. If anything, these circumstances suggest, contrary to the Final Rejection, that there was not any "expectation of successfully producing an enhanced skin treatment" as Applicant have discovered.

There has been no showing of a motivation or incentive to combine the cited references to arrive at Applicants' invention. "This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not 'evidence.'" *Brown & Williams Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 56 USPQ2d 1456 (Fed. Cir. 2000). In this case, the Final Rejection supports its obviousness rejections by combining a multitude of references solely on the basis of broad, conclusory statements about their alleged teachings. This is not "evidence" of a motivation or incentive to combine, particularly when the references themselves do not provide any such motivation or incentive. As such, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports are not properly combinable as set forth in the Final Rejection. For at least the foregoing reasons, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports do not render obvious claims 1-12, 14, 15, 17, 19-21, 23, 24, 29, 30, 34, 35, 38-41 of the present application.

B. *Claims 43, 44, 46 and 54*

The arguments set forth above are hereby incorporated by reference so as to minimize repetition.

For the reasons discussed above, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest a method of using a combination of urea and coenzyme Q10

in a ratio of from about 6:1 to about 10:1 (wt./wt.), which is required in claims 43, 44, 46 and 54 of the present application. Eucerin® Product Package and Eucerin® Press Release fail to even mention urea. Additionally, as noted above, the Final Rejection (p. 4, last para.) admitted that Eucerin® Product Package and Eucerin® Press Release fail to teach adding urea.

Further, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest using the required combination of urea and coenzyme Q10 for enhancing moisture retention in the skin as recited in claim 43, reducing the rate of escape of water from the epidermis as recited in claim 44, moisturizing the skin as recited in claim 46, or increasing cumulative skin moisturization as recited in claim 54. Moreover, nothing in Eucerin® Product Package or Eucerin® Press Release would have suggested the desirability of using the required combination of urea and coenzyme Q10 to affect the results recited in any of claims 43, 44, 46 and 54. As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein so as to perform the methods recited in any of claims 43, 44, 46 and 54 of the present application.

Likewise, for the reasons discussed above, Business Wire and Bertelli fail to teach or suggest a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 43, 44, 46 and 54. The Final Rejection (p. 3, third para.) even admitted that Business Wire and Bertelli fail to teach adding urea. Further, Business Wire and Bertelli do not teach or suggest using the required combination of urea and coenzyme Q10 for enhancing moisture retention in the skin as recited in claim 43, reducing the rate of escape of water from the epidermis as recited in claim 44, moisturizing the skin as recited in claim 46, or increasing cumulative skin moisturization as recited in claim 54. Moreover, there is nothing in Business Wire or Bertelli that would have suggested the desirability of using the required combination of urea and coenzyme Q10 to affect the results recited in any of claims 43, 44, 46 and 54. As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein to perform the methods recited in any of claims 43, 44, 46 and 54 of the present application.

Also, for the reasons discussed above, FDC Reports, which describes Beiersdorf's "Eucerin Plus" product (containing 5% urea), fails to teach or suggest modifying the product by adding coenzyme Q10 and, in fact, fails to even mention coenzyme Q10. There is no teaching or suggestion in FDC Reports to formulate urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in any of claims 43, 44, 46 and 54 of the present application. Further, FDC Reports does not teach or suggest using the required

combination of urea and coenzyme Q10 for enhancing moisture retention in the skin as recited in claim 43, reducing the rate of escape of water from the epidermis as recited in claim 44, moisturizing the skin as recited in claim 46, or increasing cumulative skin moisturization as recited in claim 54. Moreover, nothing in FDC Reports would have suggested the desirability of using the required combination of urea and coenzyme Q10 to affect the results recited in claims 43, 44, 46 and 54 of the present application. As such, there is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus so as to perform the methods recited in any of claims 43, 44, 46 and 54 of the present application.

The Final Rejection fails to set forth a proper legal basis for combining the teachings of Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports so as to arrive at the invention recited in claims 43, 44, 46 and 54. The assertion in the Final Rejection that adding 5% urea to the Eucerin anti-wrinkle product would have been obvious “as motivated by Bertelli and FDC Reports” (p. 5, last para.) directly contradicts its own admission that Bertelli fails to teach adding urea in the Eucerin composition (p. 3, third para.). Further, there is no evidentiary basis for the alleged “expectation of successfully producing an enhanced skin treatment” asserted in the Final Rejection (p. 5, last para.). Business Wire and FDC Reports appear to suggest the contrary to the extent that Beiersdorf’s license does not appear to have allowed them to use coenzyme Q10 in their Eucerin Plus product line. As such, there is no evidence of an “expectation” as alleged in the Final Rejection.

For the reasons discussed above, the Final Rejection has failed to produce any evidence clearly and particularly showing a motivation or incentive for combining Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports so as to arrive at Applicants’ invention. The references themselves do not provide any such motivation or incentive. As such, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports are not properly combinable. For at least the foregoing reasons, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports do not render obvious claims 43, 44, 46 and 54 of the present application.

C. *Claim 45*

The arguments set forth above are hereby incorporated by reference so as to minimize repetition.

For the reasons discussed above, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.), as also required in claim 45 of the present application. Eucerin® Product Package and Eucerin® Press Release fail to even mention urea, and the Final Rejection (p. 4, last para.) admitted that Eucerin® Product Package and Eucerin® Press Release fail to teach adding urea.

Further, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest using the required combination of urea and coenzyme Q10 for improving the after-feel of a cosmetic composition as recited in claim 45 of the present application. Moreover, there is nothing in Eucerin® Product Package or Eucerin® Press Release that would have suggested the desirability of using the required combination of urea and coenzyme Q10 for improving the after-feel of a cosmetic composition. As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein so as to perform the method recited in claim 45 of the present application.

Likewise, for the reasons discussed above, Business Wire and Bertelli fail to teach or suggest using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.), as recited in claim 45 of the present application. The Final Rejection (p. 3, third para.) admitted that Business Wire and Bertelli fail to teach adding urea. Further, Business Wire and Bertelli do not teach or suggest using the required combination of urea and coenzyme Q10 for improving the after-feel of a cosmetic composition as recited in claim 45, of the present application. Moreover, there is nothing in Business Wire or Bertelli that would have suggested the desirability of using the required combination of urea and coenzyme Q10 to improve the after-feel of a cosmetic composition. As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein so as to perform the method recited in claim 45 of the present application.

Further, FDC Reports, which describes Beiersdorf's "Eucerin Plus" product (containing 5% urea), fails to teach or suggest modifying the product by adding coenzyme Q10 and, in fact, fails to even mention coenzyme Q10. There is simply no teaching or suggestion in FDC Reports to formulate urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claim 45 of the present application. Further, FDC Reports does not teach or suggest using the required combination of urea and coenzyme Q10 for improving the after-feel of a cosmetic composition as recited in claim 45, of the present application. Moreover, there is nothing in FDC Reports that would have suggested the

desirability of using the required combination of urea and coenzyme Q10 to improve the after-feel of a cosmetic composition. As such, there is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus so as to perform the method recited in claim 45 of the present application.

The Final Rejection fails to set forth a proper legal basis for combining the teachings of Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports so as to arrive at the invention recited in claim 45. The assertion in the Final Rejection that adding 5% urea to the Eucerin anti-wrinkle product would have been obvious “as motivated by Bertelli and FDC Reports” (p. 5, last para.) directly contradicts its own admission that Bertelli fails to teach adding urea in the Eucerin composition (p. 3, third para.). Further, there is no evidentiary basis for the alleged “expectation of successfully producing an enhanced skin treatment” asserted in the Final Rejection (p. 5, last para.). Business Wire and FDC Reports appear to suggest the contrary to the extent that Beiersdorf’s license does not appear to have provided for the use of coenzyme Q10 in Eucerin Plus.

For the reasons discussed above, the Final Rejection has failed to produce any evidence clearly and particularly showing a motivation or incentive to combine the teachings of Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports so as to arrive at Applicants’ invention. The references themselves do not provide any such motivation or incentive. As such, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports are not properly combinable. For at least the foregoing reasons, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli and FDC Reports do not render obvious claim 45 of the present application.

**3. Rejection of Claims 13, 16, 18, 22, 28, 31-33, 36, 42, 47-53 and 55-68 over Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports, and Hoppe**

The arguments set forth above are hereby incorporated by reference in the following sections so as to minimize repetition.

**A. *Claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68***

For the reasons discussed above, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest formulating a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application. Eucerin® Product Package and Eucerin® Press Release fail to even mention urea, and the Final Rejection (p. 4, last para.) admitted that Eucerin® Product Package and Eucerin® Press Release fail to teach adding urea. Further,

there is nothing in Eucerin® Product Package or Eucerin® Press Release that would have suggested the desirability of formulating urea and coenzyme Q10 as recited in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68. As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein so as to arrive at the composition recited in any of claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application.

Likewise, for the reasons discussed above, Business Wire and Bertelli fail to teach or suggest formulating a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application. The Final Rejection (p. 3, third para.) admitted that Business Wire and Bertelli fail to teach adding urea. Further, there is nothing in Business Wire or Bertelli that would have suggested the desirability of formulating the required combination of urea and coenzyme Q10. As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein so as to arrive at the composition recited in any of claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application.

Also, for the reasons discussed above, FDC Reports, which describes Beiersdorf's "Eucerin Plus" product (containing 5% urea), fails to teach or suggest modifying the product by adding coenzyme Q10 and, in fact, fails to even mention coenzyme Q10. There is no teaching or suggestion in FDC Reports to formulate urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in so as to arrive at the composition recited in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application. Further, there is nothing in FDC Reports that would have suggested the desirability of modifying Eucerin Plus to include the required combination of urea and coenzyme Q10, particularly when, as discussed above, Beiersdorf's license does not appear to have provided for such a combination. As such, there is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus so as to arrive at the composition recited in any of claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application.

The Final Rejection further relies on Hoppe on the grounds that a person of ordinary skill in the art allegedly would have looked to Hoppe for guidance concerning the amounts of additives to use (p. 6, last para.). However, for the reasons discussed above, Hoppe fails to teach or suggest adding urea in the first instance. Further, as discussed above, the Final Rejection even admitted (p. 3, first full para.) that Hoppe fails to teach adding urea. Moreover, there is nothing in Hoppe that would have suggested the desirability of

formulating urea and coenzyme Q10 as recited in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68. As such, a person of ordinary skill in the art would not have looked to Hoppe for guidance in formulating any of the compositions recited in claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application.

For the reasons discussed above, the Final Rejection has failed to set forth a proper legal basis for combining the teachings of the cited references so as to arrive at the claimed invention. There has been no showing of a motivation or incentive to combine the cited references so as to arrive at Applicants' invention. Rather, the Final Rejection combines the references on the basis of broad conclusory statements about their alleged teachings, which is not "evidence" of a motivation or incentive to combine. There is no credible evidence clearly and particularly showing a motivation or incentive to combine the multitude of references cited in support the obviousness rejection (Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports and Hoppe). The references themselves do not provide any such motivation or incentive. As such, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports and Hoppe are not properly combinable and do not render obvious claims 13, 16, 18, 22, 28, 31-33, 36, 42 and 62-68 of the present application.

B. *Claims 47-53 and 55-61*

For the reasons discussed above, Eucerin® Product Package and Eucerin® Press Release fail to teach or suggest a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 47-53 and 55-61 of the present application. Eucerin® Product Package and Eucerin® Press Release fail to even mention urea, and the Final Rejection (p. 4, last para.) admitted that Eucerin® Product Package and Eucerin® Press Release fail to teach adding urea. Further, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest using the required combination of urea and coenzyme Q10 for moisturizing the skin as recited in claims 47-53, or increasing cumulative skin moisturization as recited in claim 55-61, of the present application. Moreover, there is nothing in Eucerin® Product Package or Eucerin® Press Release that would have suggested the desirability of combining urea and coenzyme Q10 to achieve the results recited in any of claims 47-53 and 55-61. As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein to perform the methods recited in any of claims 47-53 and 55-61 of the present application.

Likewise, for the reasons discussed above, Business Wire and Bertelli fail to teach or suggest a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in any of claims 47-53 and 55-61 of the present application. The Final Rejection (p. 3, third para.) even admitted that Business Wire and Bertelli fail to teach adding urea. Further, Business Wire and Bertelli do not teach or suggest using the required combination of urea and coenzyme Q10 for moisturizing the skin as recited in claims 47-53, or increasing cumulative skin moisturization as recited in claim 55-61, of the present application. Moreover, there is nothing in Business Wire or Bertelli that would have suggested the desirability of combining urea and coenzyme Q10 to achieve the results recited in claims 47-53 and 55-61. As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein so as to perform the method recited in any of claims 47-53 and 55-61 of the present application.

Also, for the reasons discussed above, FDC Reports, which describes Beiersdorf's 5% urea product ("Eucerin Plus") fails to teach or suggest modifying the product by adding coenzyme Q10 and, in fact, fails to even mention coenzyme Q10. There is no teaching or suggestion in FDC Reports of a method of using a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 47-53 and 55-61 of the present application. Further, FDC Reports does not teach or suggest using the required combination of urea and coenzyme Q10 for moisturizing the skin as recited in claims 47-53, or increasing cumulative skin moisturization as recited in claim 55-61. Moreover, nothing in FDC Reports would have suggested the desirability of combining urea and coenzyme Q10 to achieve the results recited in any of claims 47-53 and 55-61. As such, there is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus to perform the method recited in any of claims 47-53 and 55-61 of the present application.

The Final Rejection further relies on Hoppe on the grounds that a person of ordinary skill in the art allegedly would have looked to Hoppe for guidance concerning the amounts of additives to use (p. 6, last para.). However, for the reasons discussed above, Hoppe fails to teach or suggest adding urea in the first instance. The Final Rejection even admitted that Hoppe fails to teach adding urea. Further, Hoppe does not teach or suggest using the required combination of urea and coenzyme Q10 for moisturizing the skin as recited in claims 47-53, or increasing cumulative skin moisturization as recited in claim 55-61. Moreover, nothing in Hoppe would have suggested the desirability of combining urea and coenzyme Q10 to achieve the results recited in any of claims 47-53 and 55-61. As such, a person of ordinary

skill in the art would not have looked to Hoppe for guidance in performing any of the methods recited in claims 47-53 and 55-61 of the present application.

For the reasons discussed above, the Final Rejection has failed to set forth a proper legal basis for combining the teachings of the cited references so as to arrive at the claimed invention. There is no showing of a motivation or incentive to combine the cited references to arrive at Applicants' invention. Rather, the Final Rejection combines the references based on broad, conclusory statements about their alleged teachings, which is not "evidence" of a motivation or incentive to combine. The Final Rejection has not produced any credible evidence clearly and particularly showing a motivation or incentive to combine the multitude of references cited in support the obviousness rejection (Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports and Hoppe). The references themselves do not provide any such motivation or incentive. As such, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports and Hoppe are not properly combinable and do not render obvious claims 47-53 and 55-61 of the present application.

4. Rejection of Claims 23-25 and 37 over Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports, Hoppe and Raab

The arguments set forth above are hereby incorporated by reference so as to minimize repetition.

For the reasons discussed above, Eucerin® Product Package and Eucerin® Press Release do not teach or suggest formulating a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 23-25 and 37 of the present application. Eucerin® Product Package and Eucerin® Press Release fail to even mention urea, and the Final Rejection admitted (p. 4, last para.) that Eucerin® Product Package and Eucerin® Press Release fail to teach adding urea. Further, there is nothing in Eucerin® Product Package or Eucerin® Press Release that would have suggested the desirability of formulating urea and coenzyme Q10 as recited in claims 23-25 and 37. As such, there is no teaching, suggestion or motivation in Eucerin® Product Package or Eucerin® Press Release to modify the products disclosed therein so as to formulate the compositions recited in any of claims 23-25 and 37 of the present application.

Likewise, for the reasons discussed above, Business Wire and Bertelli fail to teach or suggest formulating a combination of urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 23-25 and 37 of the present application. The Final Rejection (p. 3, third para.) admitted that Business Wire and Bertelli fail to teach adding urea.

Further, there is nothing in Business Wire or Bertelli that would have suggested the desirability of formulating the required combination of urea and coenzyme Q10. As such, there is no teaching, suggestion or motivation in Business Wire or Bertelli to modify the subject matter disclosed therein so as to arrive at the composition recited in any of claims 23-25 and 37 of the present application.

Also for the reasons discussed above, FDC Reports, which describes Beiersdorf's "Eucerin Plus" product (containing 5% urea), fails to teach or suggest modifying the product by adding coenzyme Q10 and, in fact, fails to even mention coenzyme Q10. There is no teaching or suggestion in FDC Reports to formulate urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) so as to arrive at the composition recited in claims 23-25 and 37 of the present application. Further, nothing in FDC Reports would have suggested the desirability of modifying Eucerin Plus to include the required combination of urea and coenzyme Q10, particularly when Beiersdorf's license does not appear to have provided for using coenzyme Q10 in Eucerin Plus. As such, there is no teaching, suggestion or motivation in FDC Reports to modify Eucerin Plus so as to formulate the compositions recited in any of claims 23-25 and 37 of the present application.

Further, for the reasons discussed above, Hoppe fails to teach or suggest adding urea, and the Final Rejection even admitted (p. 3, first full para.): "Hoppe et al. fails to teach adding urea." Moreover, there is nothing in Hoppe that would have suggested the desirability of formulating urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as required in claims 23-25 and 37. There is simply no teaching, suggestion or motivation in Hoppe to modify the subject matter disclosed therein so as to arrive at the composition recited in any of claims 23-25 and 37 of the present application.

The Final Rejection additionally relies on Raab and argues that Raab allegedly provides motivation to add soothing additives "because of an expectation of successfully producing topical composition effective to treat irritated skin" (p. 7, fourth para.). This assertion is conclusory and ignores the fact that Raab (as discussed above) fails to teach or suggest the claimed compositions in the first instance. While Raab describes combining urea with certain glucocorticoids, Raab fails to teach or suggest combining urea with coenzyme Q10, and fails to even mention coenzyme Q10 (or any other ubiquinones). Moreover, nothing in Raab would have suggested the desirability of combining urea and coenzyme Q10, and much less formulating a composition containing urea and coenzyme Q10 in a ratio of from about 6:1 to about 10:1 (wt./wt.) as recited in claims 23-25 and 37 of the present

application. Raab simply does not provide any teaching, suggestion or motivation to modify the subject matter disclosed therein so as to formulate the claimed compositions.

Again, for the reasons discussed above, the Final Rejection has failed to establish a proper legal basis for combining the cited references. There has been no showing of a motivation or incentive to combine the cited references in such a way as to arrive at the claimed invention. Rather, the Final Rejection combines the references based on broad, conclusory statements about their alleged teachings, which is not “evidence” of a motivation or incentive to combine. The Final Rejection has failed to produce credible evidence clearly and particularly showing a motivation or incentive to combine the multitude of references cited in support the obviousness rejection (Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports, Hoppe and Raab). As the references themselves do not provide any such motivation or incentive, Eucerin® Product Package, Eucerin® Press Release, Business Wire, Bertelli, FDC Reports, Hoppe and Raab are not properly combinable and do not render obvious claims 23-25 and 37 of the present application.

5. Declaration Under 37 C.F.R. § 132

The Declaration Under 37 C.F.R. § 132 of Usha V. Murthy (“Rule 132 Declaration”), a copy of which is provided in the Evidence Appendix, was submitted on April 19, 2003 in response to the Office Action immediately preceding the Final Rejection. The Rule 132 Declaration provides data showing the cumulative skin moisturization of an exemplary composition having a 6:1 (wt./wt.) ratio of urea to coenzyme Q10. The Rule 132 Declaration was submitted to show, *inter alia*, that the claimed compositions should exhibit excellent moisturization properties over the recited range.

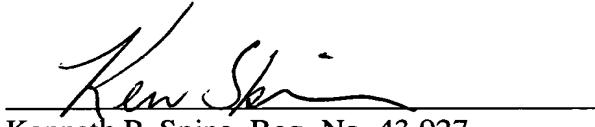
The Rule 132 Declaration also shows that combining relatively small amounts of coenzyme Q10 (0.05 wt%) with urea (0.30 wt%) provides a significant increase in cumulative skin moisturization relative to urea alone. The present specification, e.g., paragraphs [0049] through [0056] (Example 3) and Fig. 3, provides similar data.

It is submitted that the Rule 132 Declaration and specification show that the recited combination of urea and coenzyme Q10 provides unexpected results, which is further evidence of non-obviousness. The Final Rejection argues (p. 8, first full para.) that Applicants “must further show that the results were greater than those which would have been expected from the prior art to an unobvious extent, and that the results are of a significant, practical advantage,” yet this is precisely what Applicants have done.

The data accompanying the Rule 132 Declaration shows that cumulative skin moisturization is more than doubled relative to urea alone when only one-sixth the amount of coenzyme Q10 is combined. In addition, Fig. 3 shows that cumulative skin moisturization is multiplied several times relative to urea alone when only one-tenth the amount of coenzyme Q10 is combined. These results are rather unexpected, particularly when the cited art completely fails to teach or suggest Applicants' discovery that coenzyme Q10 (most remarkably) when combined with urea in the recited range dramatically improves moisturization properties. Accordingly, the claimed invention is not obvious over the cited references.

In view of the foregoing, the Appellant respectfully requests reversal of all of the Examiner's rejections.

Respectfully submitted,



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Kenneth P. Spina, Reg. No. 43,927  
One of the Attorneys for the Appellant  
LEYDIG, VOIT & MAYER, LTD.  
Two Prudential Plaza, Suite 4900  
180 North Stetson Street  
Chicago, Illinois 60601-6780  
(312) 616-5600 (telephone)  
(312) 616-5700 (facsimile)

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*CLAIMS APPENDIX*

1. A composition comprising a skin moisturizing effective amount of a combination of urea and coenzyme Q10, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.).
2. The composition of claim 1, wherein the composition is in the form of an emulsion.
3. The composition of claim 2, wherein the emulsion is an oil-in-water or water-in-oil emulsion.
4. The composition of claim 1, further comprising water, which is present in an amount of from about 50% to about 90% by weight of the composition.
5. The composition of claim 3, further comprising oil, which is present in an amount of from about 10% to about 50% by weight of the composition.
6. The composition of claim 1, wherein the urea is present in an amount of from about 0.02% to about 15% by weight of the composition.
7. The composition of claim 6, wherein the urea is present in an amount of from about 0.1% to about 10% by weight of the composition.
8. The composition of claim 1, wherein the coenzyme Q10 is present in an amount of from about 0.001% to about 5% by weight of the composition.
9. The composition of claim 8, wherein the coenzyme Q10 is present in an amount of from about 0.01% to about 2% by weight of the composition.
10. The composition of claim 1, wherein the ratio of urea to coenzyme Q10 in the composition is about 9:1 (wt./wt.).
11. The composition of claim 1, wherein the ratio of urea to coenzyme Q10 in the composition is about 10:1 (wt./wt.).
12. The composition of claim 1, further comprising an emulsifier.

13. The composition of claim 12, wherein the emulsifier is present in an amount of from about 1.5% to about 20% by weight of the composition.

14. The composition of claim 1, further comprising a thickener.

15. The composition of claim 14, wherein the thickener is selected from the group consisting of gums, cellulosics, acrylic polymers, carbomers, and combinations thereof.

16. The composition of claim 14, wherein the thickener is present in an amount of from about 0.1% to about 5% by weight of the composition.

17. The composition of claim 1, further comprising a sunscreen.

18. The composition of claim 17, wherein the sunscreen is present in an amount of from about 0.01% to about 20% by weight of the composition.

19. The composition of claim 1, further comprising a preservative.

20. The composition of claim 1, wherein the oil phase comprises an oil selected from the group consisting of silicone oils, triglyceride esters, natural oils, waxes, hydrocarbons, phospholipids, polyhydric fatty alcohols, polyethers, and combinations thereof.

21. The composition of claim 1, further comprising a solid emollient.

22. The composition of claim 21, wherein the solid emollient is present in an amount of from about 0.1% to about 10% by weight of the composition.

23. The composition of claim 1, further comprising a soothing additive.

24. The composition of claim 23, wherein the soothing additive is selected from the group consisting of allantoin, natural moisturizing and soothing botanical extracts, anti-inflammatory agents, and combinations thereof.

25. The composition of claim 23, wherein the soothing additive is present in an amount of from about 0.001% to about 5% by weight of the composition.

26. The composition of claim 1, wherein the composition further comprises an antioxidant other than coenzyme Q10.

27. The composition of claim 26, wherein the antioxidant is selected from the group consisting of antioxidant vitamins and combinations thereof.

28. The composition of claim 26, wherein the antioxidant is present in an amount of from about 0.001% to about 5% by weight of the composition.

29. The composition of claim 1, further comprising a chemical neutralizer.

30. The composition of claim 29, wherein the neutralizer comprises one or more chemical bases.

31. The composition of claim 29, wherein the neutralizer is present in an amount of from about 0.01% to about 10% by weight of the composition.

32. The composition of claim 1, further comprising an odor-masking agent.

33. The composition of claim 32, wherein the odor masking agent is present in an amount of from about 0.01% to about 3% by weight of the composition.

34. The composition of claim 1, further comprising a moisturizing additive.

35. The composition of claim 34, wherein the moisturizing additive is selected from the group consisting of esters, humectants, natural botanical extracts, phospholipids, silicones, occlusive agents, natural oils, and combinations thereof.

36. The composition of claim 35, wherein the moisturizing additive is present in an amount of from about 0.0001% to about 25% by weight of the composition.

37. The composition of claim 1, wherein the composition imparts skin with a moisture index, as measured by Novameter DPM9003, of at least about 50% relative to untreated skin when applied in an amount of 155mg/cm<sup>2</sup> skin about 120 minutes after application.

38. The composition of claim 1, wherein the composition is in the form a cream, a lotion, a solution, an ointment, or a gel.

39. A cosmetic composition comprising:

(a) urea, which is present in an amount of from about 0.1% to about 10% by weight of the composition;

(b) coenzyme Q10, which is present in an amount of from about 0.001% to about 5% by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.); and, optionally, one or more of the following ingredients:

- (i) an emulsifier;
- (ii) a thickener;
- (iii) a preservative;
- (iv) a sunscreen;
- (v) a chemical neutralizer;
- (vi) an odor-masking agent;
- (vii) a solid emollient;
- (viii) a soothing additive;
- (ix) a moisturizing additive; and
- (x) an antioxidant.

40. The composition of claim 39, further comprising water and oil.

41. A cosmetic composition comprising an emulsion, the emulsion comprising:

(a) an aqueous phase;

(b) an oil phase;

(c) urea, which is present in an amount of from about 0.1% to about 10% by weight of the composition;

(d) coenzyme Q10, which is present in an amount of from about 0.001% to about 5% by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.); and, optionally, one or more of the following ingredients:

- (i) an emulsifier;
- (ii) a thickener;
- (iii) a preservative;
- (iv) a sunscreen;
- (v) a chemical neutralizer;

- (vi) an odor-masking agent;
- (vii) a solid emollient;
- (viii) a soothing additive;
- (ix) a moisturizing additive; and
- (x) an antioxidant.

42. The composition of claim 40, wherein:

the aqueous phase is present in an amount of from about 50% to about 90% by weight of the composition;

the oil phase is present in an amount of from about 10% to about 50% by weight of the composition;

the emulsifier is present in an amount of from about 0% to about 20% by weight of the composition;

the thickener is present in an amount of from about 0% to about 5% by weight of the composition;

the preservative is present in an amount of from about 0.01% to about 3% by weight of the composition;

the sunscreen is present in an amount of from about 0% to about 20% by weight of the composition;

the chemical neutralizer is present in an amount of from about 0% to about 10% by weight of the composition;

the odor-masking agent is present in an amount of from about 0% to about 3% by weight of the composition;

the solid emollient is present in an amount of from about 0% to about 10% by weight of the composition;

the soothing additive is present in an amount of from about 0% to about 5% by weight of the composition;

the moisturizing additive is present in an amount of from about 0% to about 20% by weight of the composition; and

the antioxidant is present in an amount of from about 0% to about 1% by weight of the composition.

43. A method of enhancing moisture retention in the skin, the method comprising topically applying a moisture-retaining effective amount of the composition of claim 1 to the skin.

44. A method of reducing the rate of escape of water from the epidermis, the method comprising topically applying a moisture-loss inhibiting effective amount of the composition of claim 1 to the skin.

45. A method of improving the after-feel of a cosmetic composition when the composition is applied to the skin, the method comprising including in the composition an after-feel enhancing-effective amount of coenzyme Q10 and urea, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.).

46. A method of moisturizing the skin, the method comprising applying to the skin a composition comprising a skin moisturizing effective amount of a combination of urea and coenzyme Q10, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.).

47. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.001% to about 5% by weight of the composition.

48. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.01% to about 2% by weight of the composition.

49. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.02% to about 2% by weight of the composition.

50. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.02% to about 1.5% by weight of the composition.

51. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.02% to about 1% by weight of the composition.

52. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.5% by weight of the composition.

53. The method of claim 46, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.05% by weight of the composition.

54. A method of increasing the cumulative skin moisturization of a cosmetic composition, which comprises adding a skin moisturizing enhancing effective amount of a combination of coenzyme Q10 and urea, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.).

55. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.001% to about 5% by weight of the composition.

56. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.01% to about 2% by weight of the composition.

57. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.02% to about 2% by weight of the composition.

58. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.02% to about 1.5% by weight of the composition.

59. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.02% to about 1% by weight of the composition.

60. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.5% by weight of the composition.

61. The method of claim 54, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.05% by weight of the composition.

62. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.001% to about 5% by weight of the composition.

63. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.01% to about 2% by weight of the composition.

64. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.02% to about 2% by weight of the composition.

65. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.02% to about 1.5% by weight of the composition.

66. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.02% to about 1% by weight of the composition.

67. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.5% by weight of the composition.

68. The composition of claim 1, wherein the amount of coenzyme Q10 is from about 0.02% to about 0.05% by weight of the composition.

*EVIDENCE APPENDIX*

The following is/are attached hereto:

(1) Declaration Under 37 C.F.R. § 1.132 of Usha V. Murthy (submitted April 19, 2004).

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ghosh et al.

Art Unit: 1617

Application No. 09/851,882

Examiner: G. Yu

Filed: May 9, 2001

For: COSMETIC COMPOSITION WITH  
IMPROVED SKIN MOISTURIZING  
PROPERTIES

**DECLARATION UNDER 37 C.F.R. § 1.132 OF USHA V. MURTHY**

Mail Stop Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Usha V. Murthy, hereby declare the following:

1. I am currently a Section Manager at Alberto-Culver and have been employed with Alberto-Culver for the past eight years. I have over 18 years of experience in the area of personal care products, with extensive experience in research and development of skin care products, including cleansing and moisturizing products. I am currently responsible for skin product development relating to cleansers, moisturizers, and specialty treatments such as wrinkle creams and acne treatments.

2. I received a Bachelor's Degree in Biology and Chemistry from the University of Illinois at Chicago in 1974, and a Master's Degree in Microbiology from Illinois Institute of Technology in 1982.

3. I am one of the named inventors in the present application. The present invention pertains to cosmetic compositions, a method of enhancing moisture retention in the skin, a method of reducing the rate of escape of water from the skin, and a method of improving the after-feel of a cosmetic composition when applied to the skin.

4. Under my direction, experiments were conducted in accordance with Example 3 of the present application. The experiments involved preparing and evaluating the skin

moisturizing effect of three samples (Sample A and Comparative Samples B and C). Sample A contained a 6:1 ratio (wt./wt.) of urea to coenzyme Q10. Comparative Sample B contained coenzyme Q10 alone, and Comparative Sample C contained urea alone. Each sample was prepared as an aqueous dispersion in accordance with Example 3 of the present application.

5. Sample A was prepared by dissolving urea and coenzyme Q10 in an aqueous polysorbate 80 solution, diluting with water to form a dispersion of urea and coenzyme Q10, and adding 2-phenoxyethanol. Comparative Sample B was prepared according to the procedure for preparing Sample A, except that urea was not included. Comparative Sample C was prepared according to the procedure for preparing Sample A, except that coenzyme Q10 was not included. The resulting dispersions contained the following components:

Dispersion	Component				
	Urea (wt.%)	Coenzyme Q10 (wt.%)	Polysorbate 80 (wt.%)	2-phenoxyethanol (wt.%)	Water (wt.%)
Sample A (6:1)	0.3	0.05	0.25	0.6	q.s.
Comparative Sample B	--	0.05	0.25	0.6	q.s.
Comparative Sample C	0.3	--	0.25	0.6	q.s.

6. One control sample also was evaluated. The control sample was a "blank" solution of polysorbate 80 (0.25 wt.%) and 2-phenoxyethanol (0.6 wt.%) in water (q.s.).

7. The testing protocol used was as follows. Five panelists were chosen. The panelists were women between 18 and 49 years of age, and were directed not to use any moisturizers on the arms on the day of the study and throughout the duration of the study. The panelists' arms were washed with soap and dried 15 minutes prior to commencing the study. Five sites on each arm of each panelist were marked off as testing areas. Skin moisturization scores were measured using a Nova DPM 9003 meter. All measurements were done in triplicate and averaged. Baseline moisturization was measured at the appropriate sites on each arm prior to the application of samples. Each assigned sample was applied (1 ml, applied four times during the first hour) to the appropriate site(s) and triplicate measurements were taken at each site and recorded at 2, 3, and 4 hours. Percent moisturization was calculated based on the Nova DPM 9003 meter readings according to the following equation: Percentage Increase = [(Final Reading - Initial Reading)/Initial Reading]

x 100. The results of the cumulative skin moisturizing effect are graphically depicted in the attached graph ("No treatment" corresponds to the control sample).

8. The data demonstrate a significant increase in cumulative skin moisturization for Sample A. The increase in cumulative skin moisturization exhibited by Sample A is surprisingly greater than what would have been expected in view of the cumulative moisturization scores for coenzyme Q10 alone (Comparative Sample B) and urea alone (Comparative Sample C).

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

3/23/04

Date

Usha Murthy

Usha V. Murthy



## Comparison of Various Blends of Q10 and Urea versus the ingredients alone

